ioSafe N2 Quick Start

Powered by Synology DSM

Part Number: 910-11386-00 REV03 Quick Start Guide, N2

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Did you purchase your N2 preloaded with Hard Drives?

Skip to "**Setup an ioSafe N2**"on **page 21**.

Table of Contents

Introduction

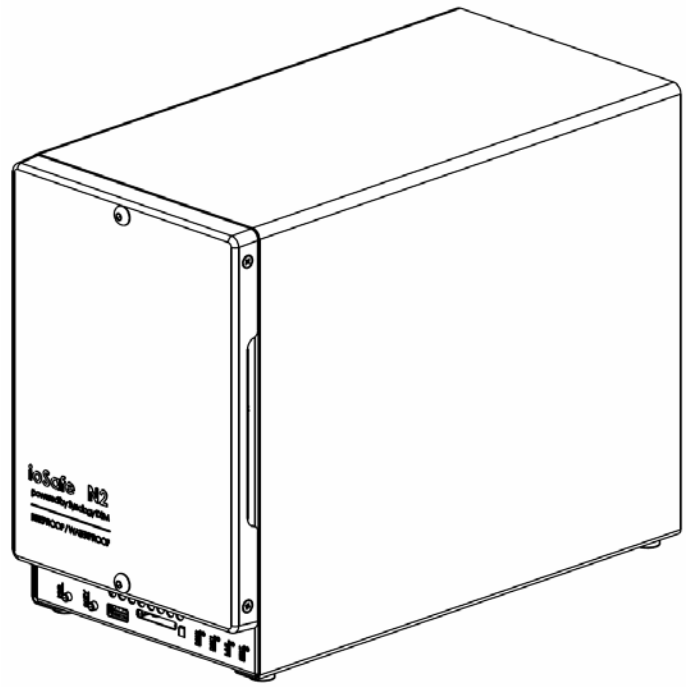
Congratulations on your purchase of the ioSafe N2 powered by Synology DSM. The ioSafe N2, based on Synology's DS213 motherboard, is a designed as a powerful way to protect your private cloud networked data from loss due to natural disasters such as fires and floods. Please read this Quick Start Guide and the User's Guide carefully to understand how to operate this device both during normal operation and during a disaster event.

Important Note: The ioSafe N2 is based on the Synology DS213 Motherboard and Synology DSM OS. Certain configuration settings may require you to select "Synology DS213", "DS213" or "Synology" as an option. Contact **techsupport@iosafe.com** if you get stuck.

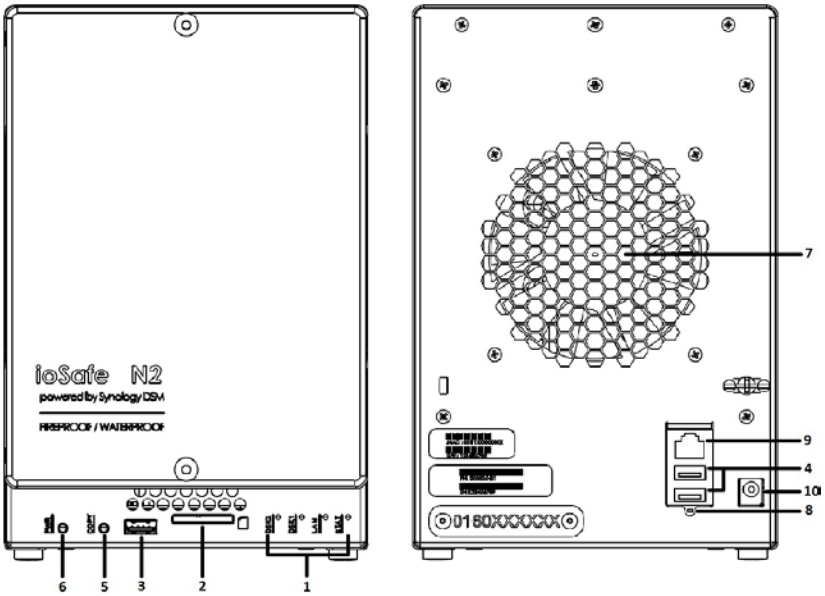
Before You Start

Before you start setting up ioSafe N2, please check the package contents to verify that you have received the items below. Please also read the safety instructions carefully before use to prevent your ioSafe N2 from any damages.

Package Contents

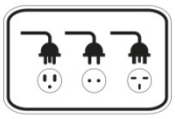
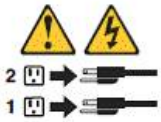
Main Unit x 1	AC Power Cord x1
	
	AC Power Adapter x1
	
	RJ-45 LAN cable x1
	
	Installation Disc x1
	
	Drive Screws x8
	
	Cord Retention Clip x1
	
	3mm Hex Tool x1
	
	Magnet x1
	

ioSafe N2 at a Glance



No.	Article Name	Location	Description
1)	LED Indicators	Front Panel	The LED indicators are used to display the status of the internal disk and the system. For more information, see "LED Indication Table" on Page 28.
2)	SD Card Slot	Front Panel	SD card slot for accessing a SD card.
3)	USB 2.0 Port	Front Panel	USB ports for adding additional external hard drives, USB printers, or other USB devices.
4)	USB 3.0 Ports	Back Panel	
5)	Copy Button	Front Panel	The Copy button lights up when you connect a USB Device to the USB port or a SD card to the SD card slot on the front panel. Pressing the button will copy the data from the connected USB device or SD card to ioSafe N2's internal HDD.
6)	Power Button	Front Panel	The power button is used to turn the ioSafe N2 on or off. To turn the N2 on, press and release the power button. The LEDS will start flashing. The system is ready when you hear a beep. To turn off the ioSafe N2, press the power button and hold it until you hear a beep sound and the Power LED starts blinking.
7)	Fan	Back Panel	To maximize cooling, please do not block the fan exhaust. If the fan is malfunctioning, the system will beep.
8)	RESET Button	Back Panel	1.To restore IP, DNS, passwords for the **admin** account to default value. 2.To reinstall the ioSafe N2.
9)	LAN Port	Back Panel	The LAN port for connecting network (RJ-45) cable to the ioSafe N2.
10)	Power Port	Back Panel	Connect the AC adapter to this port.

Safety Instructions

	For optimized cooling during normal operation, keep out of from direct sunlight. During a high temperature event such as a fire, the internal HDD's are protected from data loss (1550°F, 30 minutes per ASTM E-119) when the main front cover is properly installed on the device. Please contact ioSafe (http://iosafe.com) for assistance during any data recovery event.
	During normal operation, do not place the ioSafe product close to any liquid. During a flood or water exposure (10' depth, full immersion, 3 days) the internal HDDs are protected from data loss when the internal waterproof cover is sufficiently tightened to the internal HDD chassis. Please contact ioSafe (http://iosafe.com) for assistance during any data recovery event.
	Before cleaning, properly shut down by pressing and holding the front power button then unplug the power cord. Wipe ioSafe product with moist cloth. Avoid chemical or aerosol cleaners for cleaning as they may affect the finish.
	The power cord must plug in to the right supply voltage. Make sure that the supplied AC voltage is correct and stable.
	To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.
	Observe electrostatic discharge (ESD) precautions during the entire installation process to eliminate possible ESD damage to the equipment. Wear an approved ESD wrist strap that is grounded when you handle an ESD-sensitive device.
	CAUTION: Risk of Explosion if battery is replaced by an incorrect type.
	Dispose of used batteries according to their instructions

Hard Drive Installation

(For Diskless Version Only)

Did you purchase your N2 preloaded with Hard Drives?

Skip to "**Setup an ioSafe N2"**on **page 21**. This section shows how to install Hard drives into an N2

Tools and Parts for Hard Drive Installation

Needed:

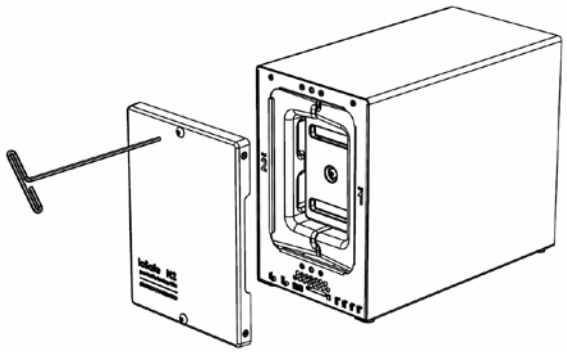
- A Phillips screwdriver
- 3mm Hex Tool (included with the ioSafe N2)
- At least one 3.5" SATA hard drive
  (Please visit **www.iosafe.com/support-n2** for compatible hard drive models.)

Note: For a RAID 1 set, it is recommended that all installed drives be the same size to make the best use of hard disk capacity.

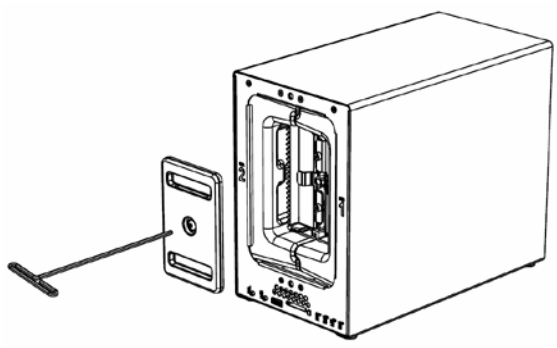
Warning: If you install a hard drive that contains data, the N2 will format the hard drive and erase all data. If you need the data in the future, please back it up before installation.

Install Hard Drives

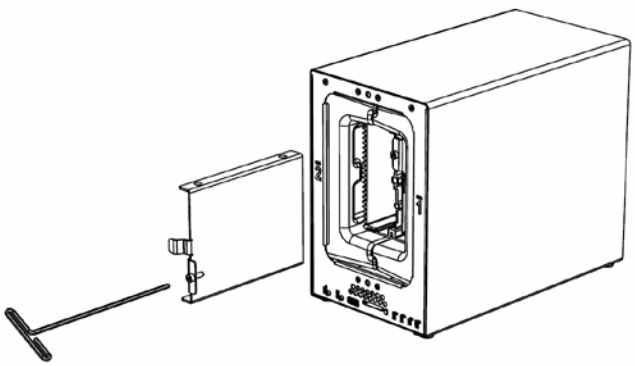
1 Remove the Front Cover using the included 3mm Hex Tool.
NOTE: All hex screws used in the N2 are designed to be captive to avoid accidental loss.



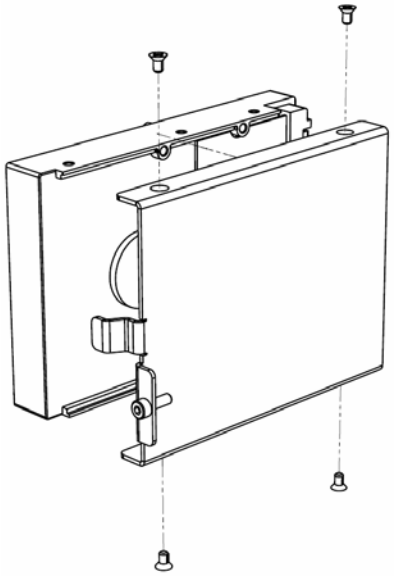
2 Remove Waterproof Drive Cover using the 3mm Hex Tool.

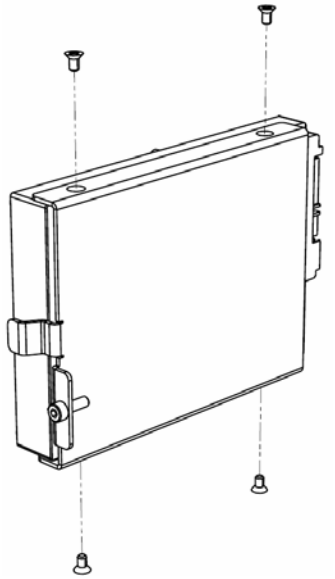


3 Remove both of the Drive Trays using the provided 3mm Hex Tool.

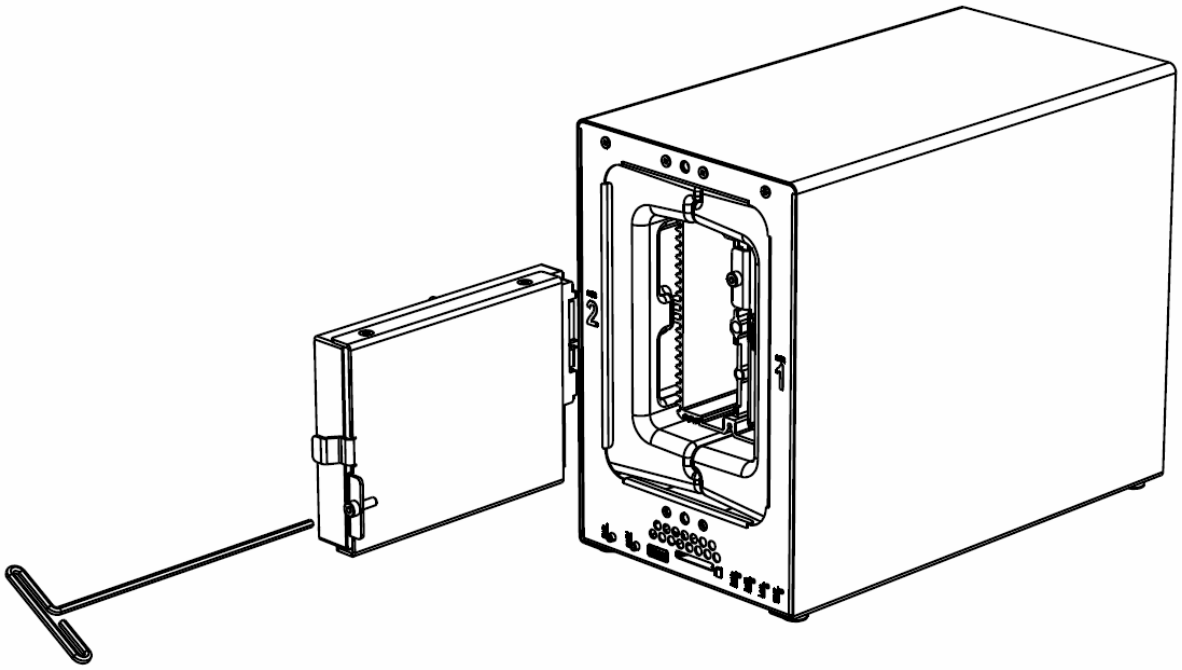


4 Install a compatible Hard Drive into the each Drive Tray using (4x) Drive Screws and a Phillips screwdriver. (Please visit **www.iosafe.com** for compatible hard drive models.)

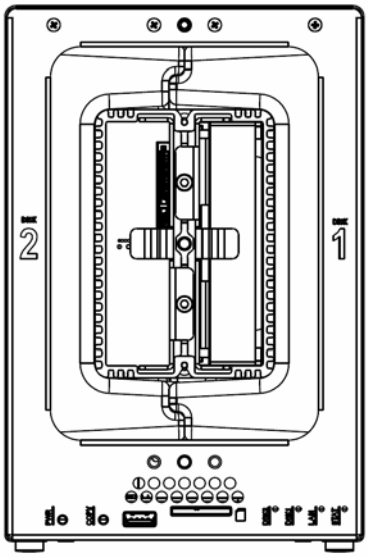




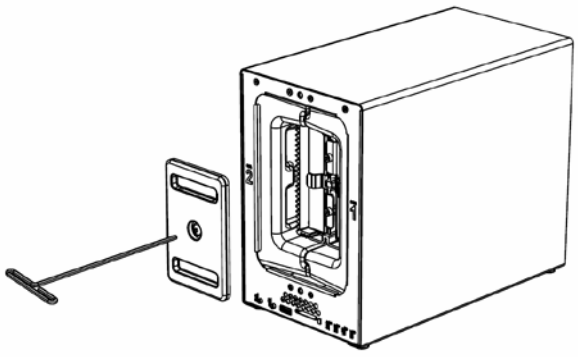
5 Insert the Hard Drives into the empty hard drive bay and tighten the screws using the 3mm Hex Tool
Note: Each Hard Drive will only fit in one orientation.



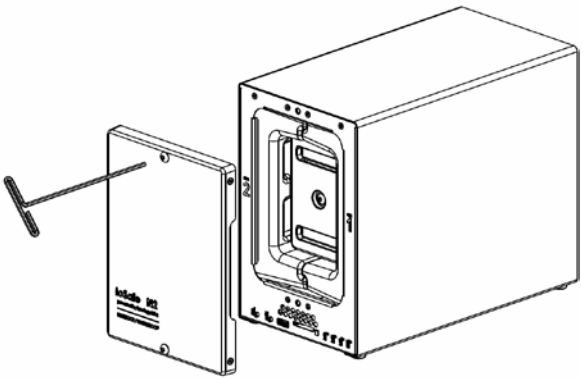
Note: If Drive replacement is required notice that Drive #2 is on the left and Drive #1 is on the right.



6 Replace the Waterproof Drive Cover and securely tighten using the supplied 3mm Hex Tool.
WARNING: BE SURE TO TIGHTEN THIS SCREW USING THE HEX TOOL. THE HEX TOOL IS DESIGNED TO FLEX SLIGHTLY WHEN THE SCREW IS SUFFICIENTLY TIGHT AND THE WATERPROOF GASKET IS COMPRESSED PROPERLY. AVOID USING TOOLS OTHER THAN THE SUPPLIED HEX TOOL AS YOU COULD UNDER TIGHTEN OR BREAK THE SCREW.

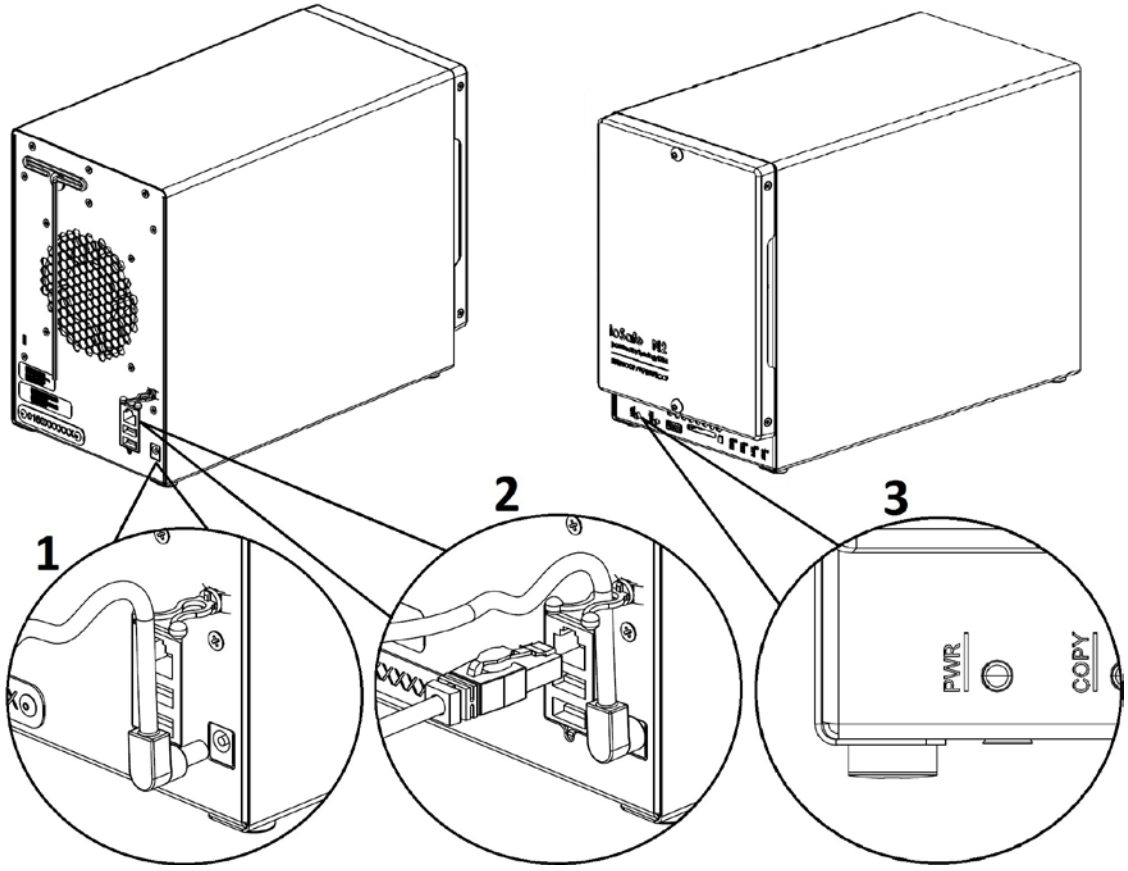


7 Install the Front Cover to finish the installation and protect the drives from fire. Keep the hex tool nearby for future use.



Connect the ioSafe N2 to your Network

1. Connect the AC adapter to the power port of the ioSafe N2. Connect one end of the AC power cord to the AC power adapter, and the other to the power outlet. Insert the plastic cable holder into the slot to retain the power cord.
2. Use the LAN cable to connect the ioSafe N2 to your switch/router/hub.
3. Press and hold the power button to turn on your DiskStation.



Your ioSafe N2 is now online and detectable from a network computer.

Install DSM on the ioSafe N2 (Diskless)

Did you purchase your N2 preloaded with Hard Drives?

Skip to "**Setup an ioSafe N2**"on **page 21**. This section shows how to install the DSM operating system on your N2. If you purchased the N2 preloaded with Hard Drives DSM was already preloaded as well.

This chapter shows how to install the Disk Station Manager (DSM), a Linux based software package that is the operating system for the ioSafe N2. DSM is the foundation of the N2, which integrates the basic functions of file sharing, centralized backup, RAID storage, multimedia streaming, virtual storage, and much more.

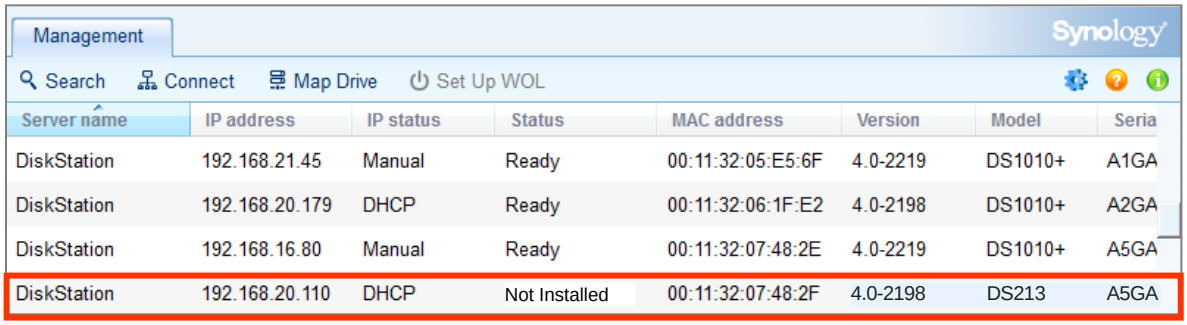
To install DSM on your ioSafe N2 use the desktop utility, **Synology Assistant**, this can be found on the included CD. Refer to the appropriate section below for setup using Windows, Mac or Linux OS.

Note: Before beginning the installation process below, make sure that the N2 is connected to your router/switch with the network cable and that the power cord plugged in and the N2 is powered on.

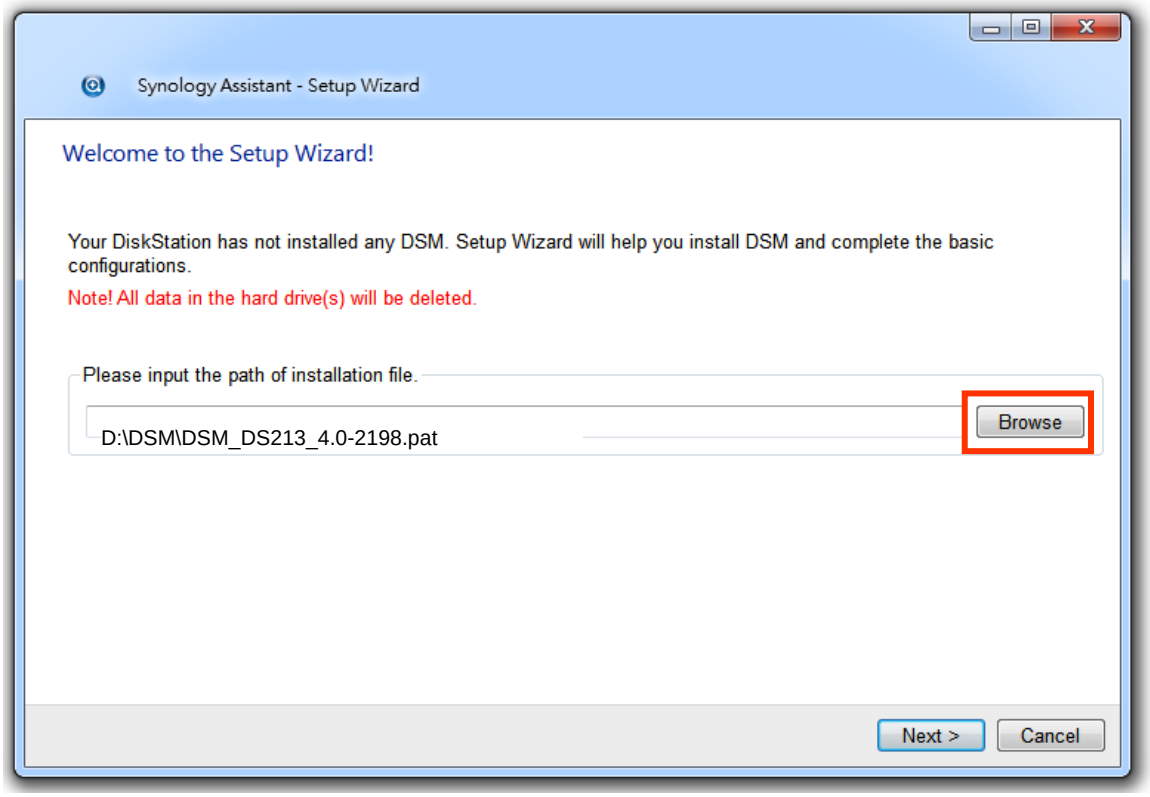
For Windows

1 Insert the installation disc into your computer, and click **Start**. Follow the onscreen instructions to complete the setup process.

2 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **Not Installed**. Double-click your ioSafe to start the setup process.



3 Click **Browse** to locate the **DSM_[DS213]_[number].pat** installation file in the **DSM** folder of your installation disc. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



4 Follow the onscreen instructions to complete the setup process.

After the installation process is finished, you can manage your ioSafe N2 with Synology DiskStation Manager (DSM). Your ioSafe N2 is now ready to use.

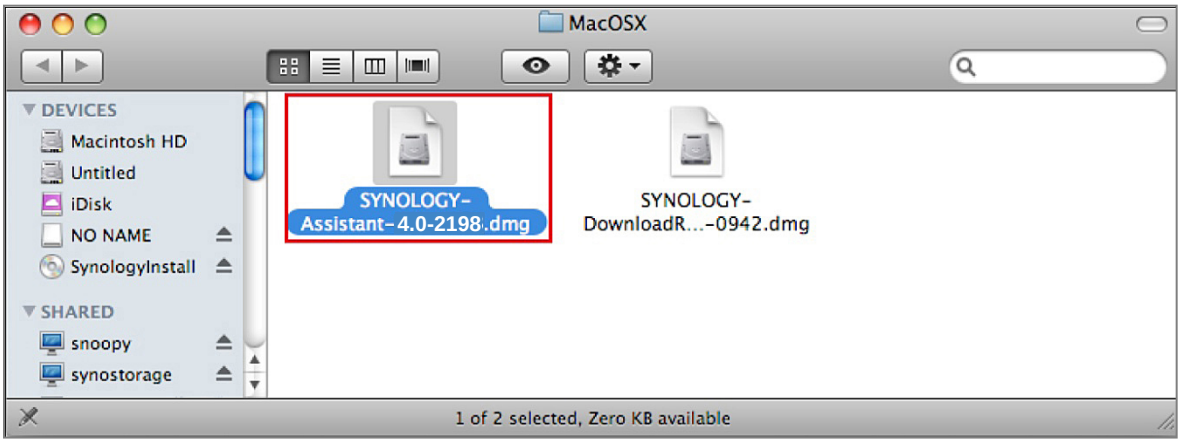
Learn More

For more information about managing your ioSafe N2 with DSM as well as advanced settings and management, refer to the ioSafe N2 User Guide available on the CD or at **www.iosafe.com/support-n2**.

For Mac OS X

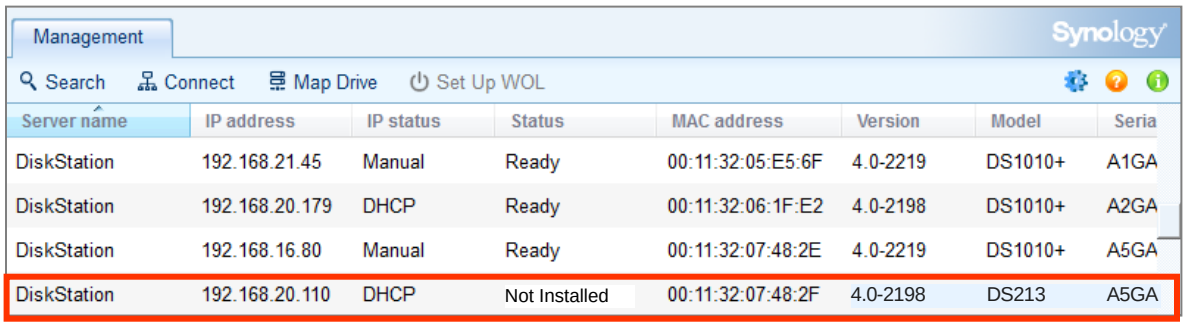
1 Insert the installation disc into your computer, and then double-click the **SynologyInstall** icon on the desktop.

2 In the window that appears, double-click the **MacOSX** folder, and then double-click **Synology Assistant-[number].dmg**. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.

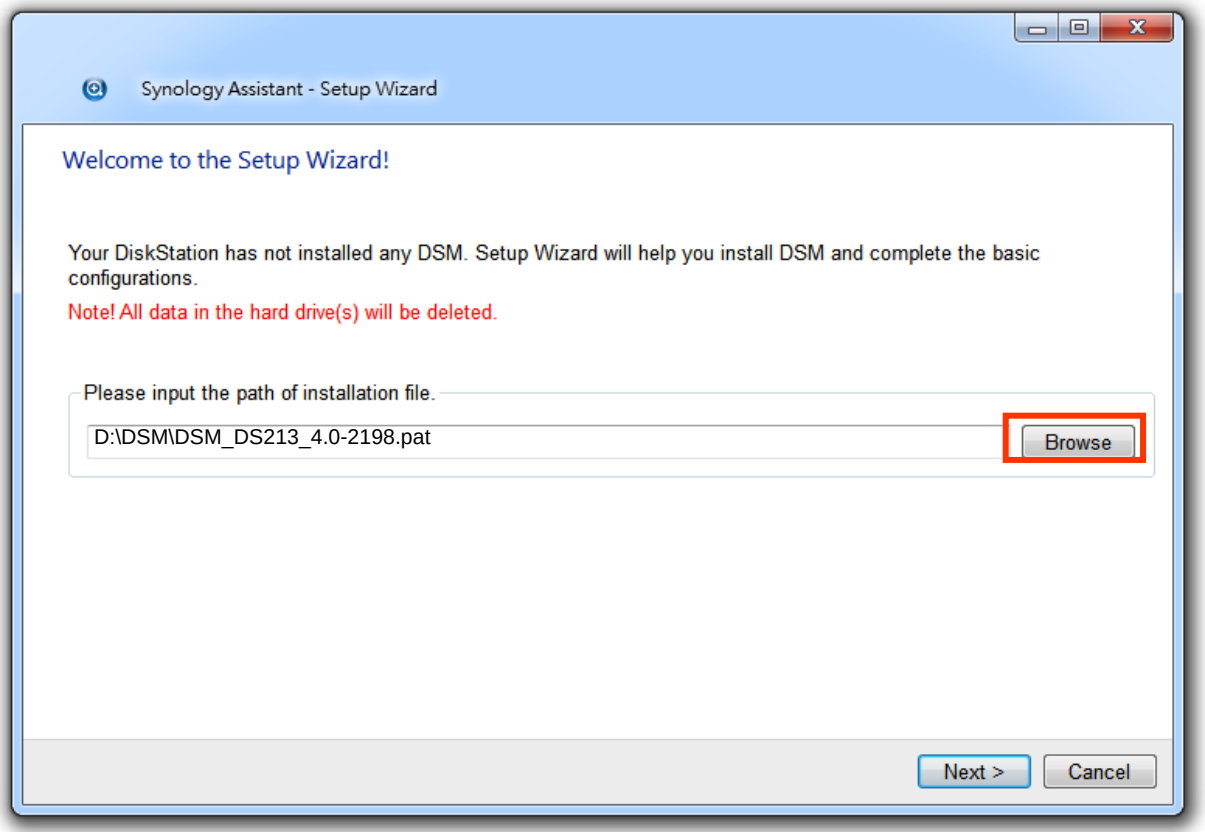


3 Double-click the **Synology Assistant.app** in the window that appears.

4 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **Not Installed**. Double-click your ioSafe to start the setup process.



5 Click **Browse** to locate the **DSM_[DS213]_[number].pat** installation file in the **DSM** folder of your installation disc. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



6 Follow the onscreen instructions to complete the setup process.

After the installation process is finished, you can manage your ioSafe N2 with Synology DiskStation Manager (DSM). Your ioSafe N2 is now ready to use.

Learn More

For more information about managing your ioSafe N2 with DSM as well as advanced settings and management, refer to the ioSafe N2 User Guide available on the CD or at **www.iosafe.com/support-n2**.

For Linux

The Linux version is optimized for **Ubuntu** distribution version 8 and 9. You can still try installation on other Linux distributions (for evaluation purpose only).

If you want to install using the command lines:

Run the script **install.sh** in the **Linux** folder of the installation disc, which will guide you through the steps below.

1 Remove the beta version of Synology Assistant (if any).

```
sudo rm -rf /usr/local/Synology /usr/local/bin/SynologyAssistant
```

2 Extract **SynologyAssistant-[number].tar.gz** to the directory you want, such as **"/usr/local"** or **"."**

```
tar -C ./ -zxvf SynologyAssistant-[number].tar.gz
```

3 If you are using 64bit Ubuntu, install the 32bit libraries.

```
sudo apt-get install ia32-libs
```

4 Create the shortcut to **/usr/local/bin**.

```
sudo ln -sf /path/install/SynologyAssistant/SynologyAssistant \
/usr/local/bin/SynologyAssistant
```

5 To run Synology Assistant, you can either use the following command:

```
/path/install/SynologyAssistant/SynologyAssistant
```

Or run the shortcut:

```
/usr/local/bin/SynologyAssistant
```

If **/usr/local/bin** exists in your environment variable **$PATH**, just type:

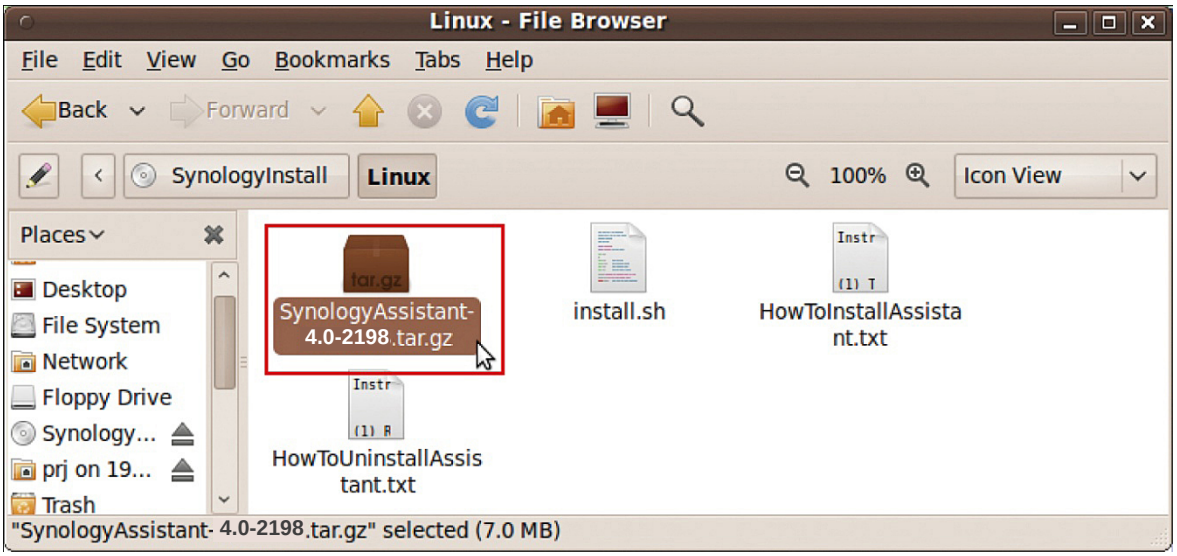
```
SynologyAssistant
```

If you want to install using the GUI:

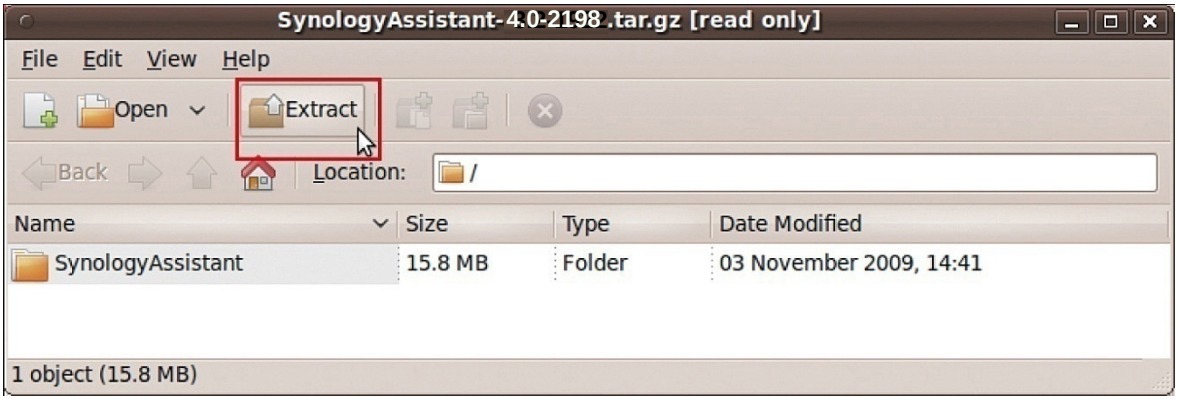
1 Go to **/usr/local** and **/usr/local/bin** and delete the following folders (if any):
Synology, **SynologyAssistant**

2 Insert the installation disc into your computer, and then double-click the **SynologyInstall** icon on the desktop.

3 In the **File Browser** window that appears, double-click the **Linux** folder, and then double-click **Synology Assistant-[number].tar.gz**. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



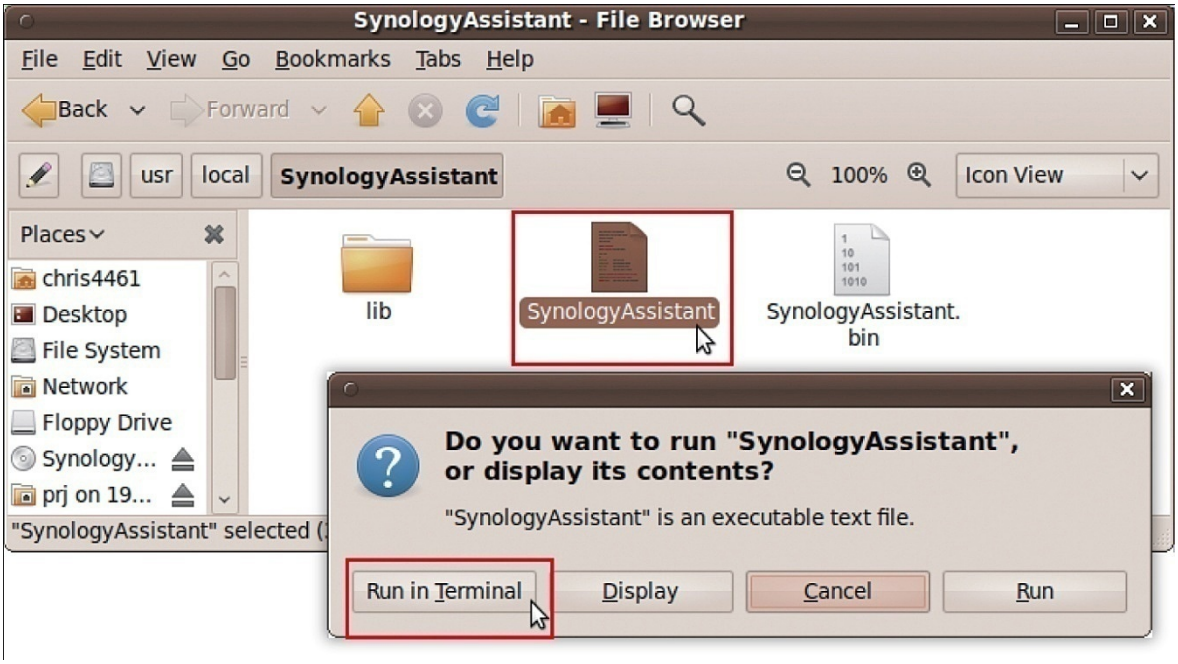
4 Click **Extract**, and then extract the **SynologyAssistant** directory to **/usr/local** or any other path.



Important: If you are using 64bit Ubuntu, you have to install the 32bit libraries before proceeding. To install, type the following command in Terminal:

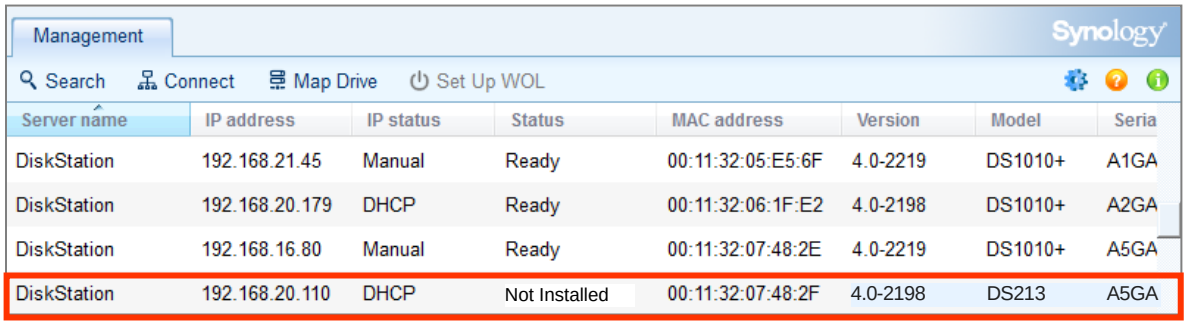
```
sudo apt-get install ia32-libs
```

5 Go to **/usr/local/SynologyAssistant** (or **[the path you just specified]/SynologyAssistant**), double-click **SynologyAssistant**, and then select **Run in Terminal** in the dialog box that appears.



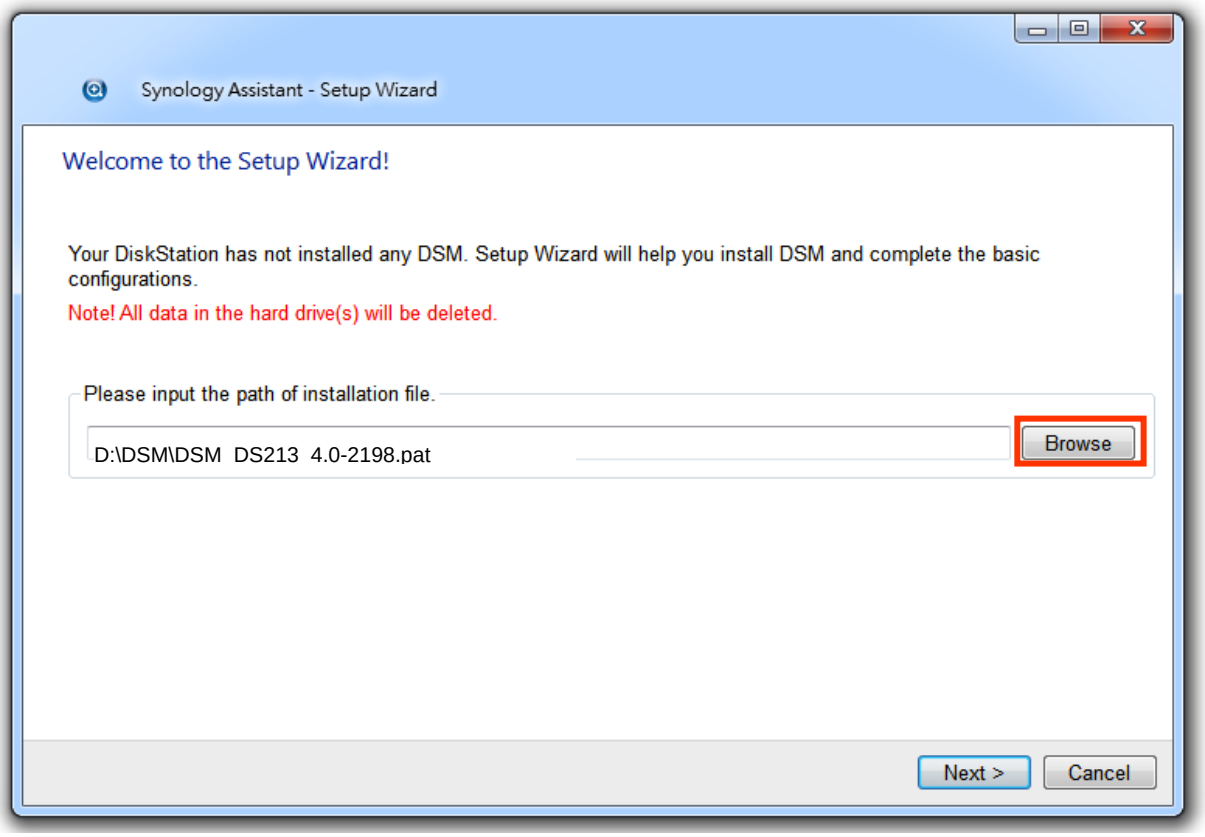
Install DSM on ioSafe N2

1 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **Not Installed**. Double-click your ioSafe to start the setup process.



Server name	IP address	IP status	Status	MAC address	Version	Model	Seria
DiskStation	192.168.21.45	Manual	Ready	00:11:32:05:E5:6F	4.0-2219	DS1010+	A1GA
DiskStation	192.168.20.179	DHCP	Ready	00:11:32:06:1F:E2	4.0-2198	DS1010+	A2GA
DiskStation	192.168.16.80	Manual	Ready	00:11:32:07:48:2E	4.0-2219	DS1010+	A5GA
DiskStation	192.168.20.110	DHCP	Not Installed	00:11:32:07:48:2F	4.0-2198	DS213	A5GA

2 Click **Browse** to locate the **DSM_[DS213]_[number].pat** installation file in the **DSM** folder of your installation disc. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



3 Follow the onscreen instructions to complete the setup process.

After the installation process is finished, you can manage your ioSafe N2 with Synology DiskStation Manager (DSM). Your ioSafe N2 is now ready to use.

Learn More

For more information about managing your ioSafe N2 with DSM as well as advanced settings and management, refer to the ioSafe N2 User Guide available on the CD or at **www.iosafe.com/support-n2**.

Setup an ioSafe N2

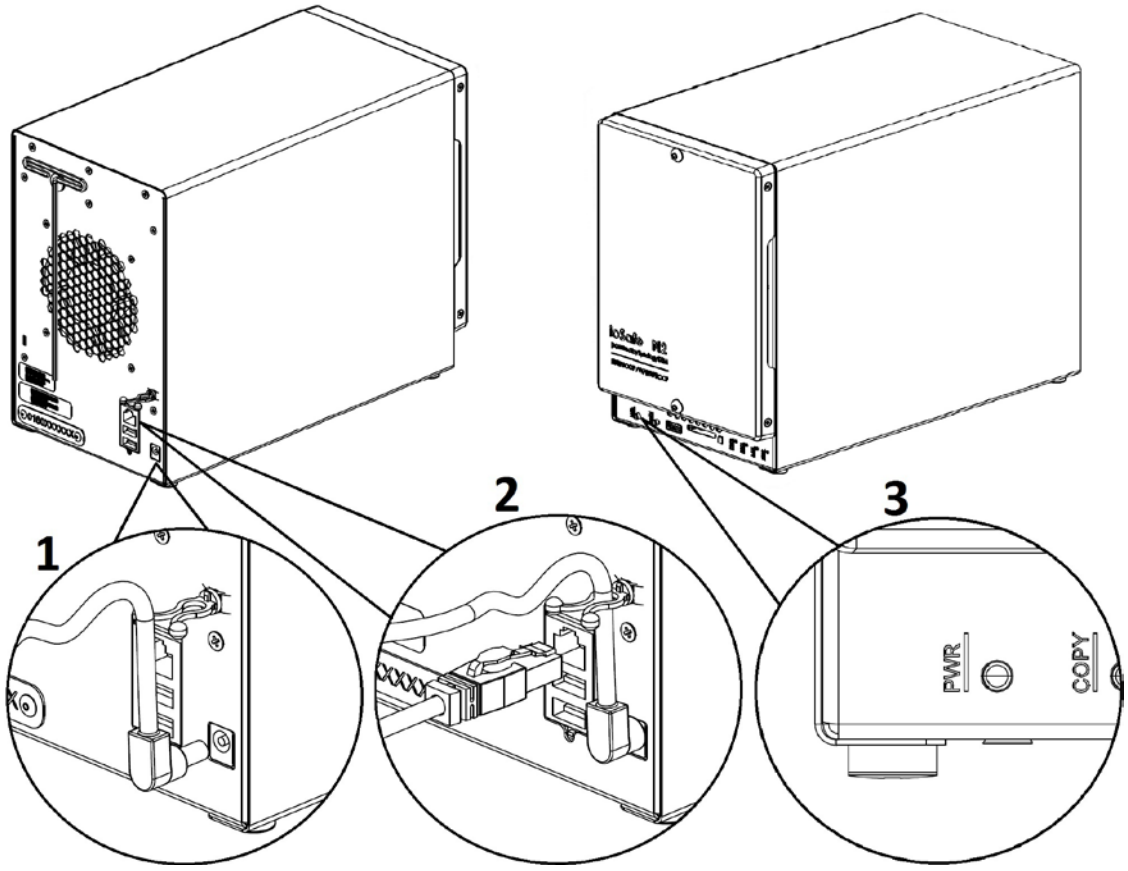
This section is for users that purchased their ioSafe N2 preloaded with Hard Drives. If ioSafe preloaded the hard drives we also preloaded the DiskStation Manager (DSM), a Linux based software package that is the operating system for the ioSafe N2. DSM is the foundation of the N2, which integrates the basic functions of file sharing**,** centralized backup**,** RAID storage**,** multimedia streaming, virtual storage**,** and much more.

Connect the ioSafe N2 to your Network

1 Connect the AC adapter to the power port of the ioSafe N2. Connect one end of the AC power cord to the AC power adapter, and the other to the power outlet. Insert the plastic cable holder into the slot to retain the power cord.

2 Use the LAN cable to connect the ioSafe N2 to your switch/router/hub.

3 Press and hold the power button to turn on your DiskStation.



Your ioSafe N2 should now be online and detectable from a network computer.

Finding your ioSafe N2 with the Synology Assistant

This section will locate your ioSafe N2 on your network.

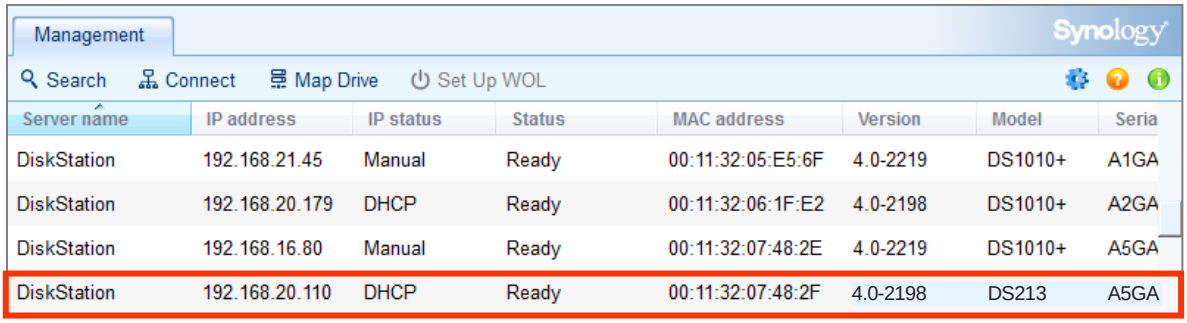
Before beginning the process below, make sure that the N2 is connected to your router/switch with the network cable and that the power cord is plugged in and the N2 is powered on.

After you complete these steps, refer to the User's Guide on the installation disc for advanced settings and management. For more information or online resources about your ioSafe N2, please visit **www.iosafe.com/support-n2**.

For Windows

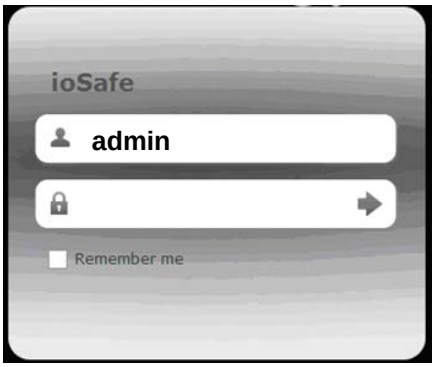
1 Insert the installation disc into your computer, and click **Synology Assistant**. Follow the onscreen instructions to complete the setup process.

2 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **DHCP Ready**. Click on connect to access your ioSafe N2.



Server name	IP address	IP status	Status	MAC address	Version	Model	Seria
DiskStation	192.168.21.45	Manual	Ready	00:11:32:05:E5:6F	4.0-2219	DS1010+	A1GA
DiskStation	192.168.20.179	DHCP	Ready	00:11:32:06:1F:E2	4.0-2198	DS1010+	A2GA
DiskStation	192.168.16.80	Manual	Ready	00:11:32:07:48:2E	4.0-2219	DS1010+	A5GA
DiskStation	192.168.20.110	DHCP	Ready	00:11:32:07:48:2F	4.0-2198	DS213	A5GA

3 A web browser should open showing the N2 Login screen. Enter the default login and password.



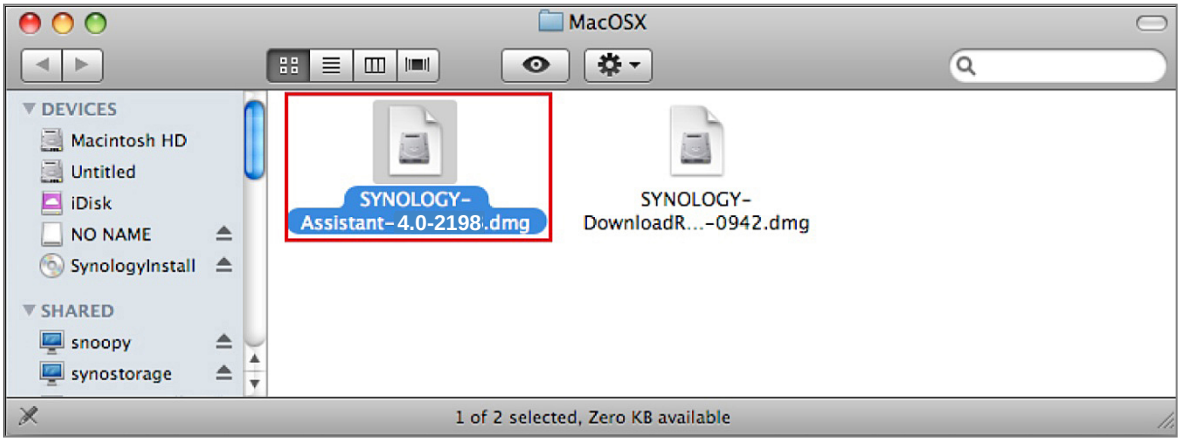
user name: admin

password: "empty"

For Mac OS X

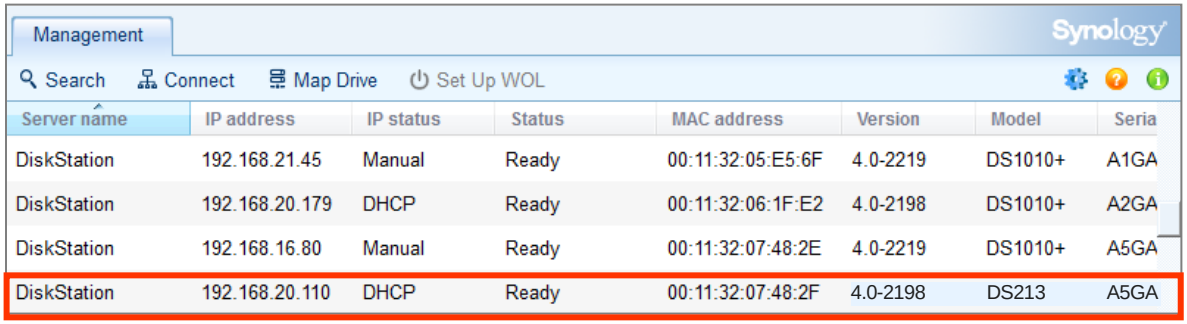
1 Insert the installation disc into your computer, and then double-click the **SynologyInstall** icon on the desktop.

2 In the window that appears, double-click the **MacOSX** folder, and then double-click **Synology Assistant-[number].dmg**. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



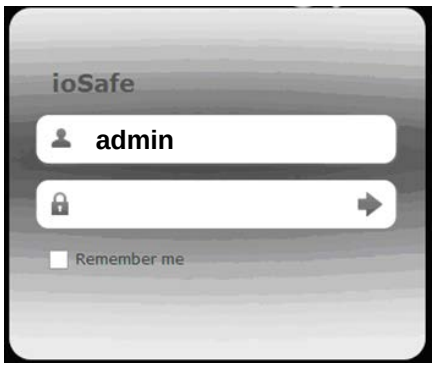
3 Double-click the **Synology Assistant.app** in the window that appears.

4 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **DHCP Ready**. Click connect to access your ioSafe N2.



Server name	IP address	IP status	Status	MAC address	Version	Model	Seria
DiskStation	192.168.21.45	Manual	Ready	00:11:32:05:E5:6F	4.0-2219	DS1010+	A1GA
DiskStation	192.168.20.179	DHCP	Ready	00:11:32:06:1F:E2	4.0-2198	DS1010+	A2GA
DiskStation	192.168.16.80	Manual	Ready	00:11:32:07:48:2E	4.0-2219	DS1010+	A5GA
DiskStation	192.168.20.110	DHCP	Ready	00:11:32:07:48:2F	4.0-2198	DS213	A5GA

5 A web browser should open showing the N2 Login screen. Enter the default login and password.



user name: admin

password: "empty"

For Linux

The Linux version is optimized for **Ubuntu** distribution version 8 and 9. You can still try installation on other Linux distributions (for evaluation purpose only).

If you want to install using the command lines:

Run the script **install.sh** in the **Linux** folder of the installation disc, which will guide you through the steps below.

1 Remove the beta version of Synology Assistant (if any).

```
sudo rm -rf /usr/local/Synology /usr/local/bin/SynologyAssistant
```

2 Extract **SynologyAssistant-[number].tar.gz** to the directory you want, such as **"/usr/local"** or **"."**

```
tar -C ./ -zxvf SynologyAssistant-[number].tar.gz
```

3 If you are using 64bit Ubuntu, install the 32bit libraries.

```
sudo apt-get install ia32-libs
```

4 Create the shortcut to **/usr/local/bin**.

```
sudo ln -sf /path/install/SynologyAssistant/SynologyAssistant \
/usr/local/bin/SynologyAssistant
```

5 To run Synology Assistant, you can either use the following command:

```
/path/install/SynologyAssistant/SynologyAssistant
```

Or run the shortcut:

```
/usr/local/bin/SynologyAssistant
```

If **/usr/local/bin** exists in your environment variable **$PATH**, just type:

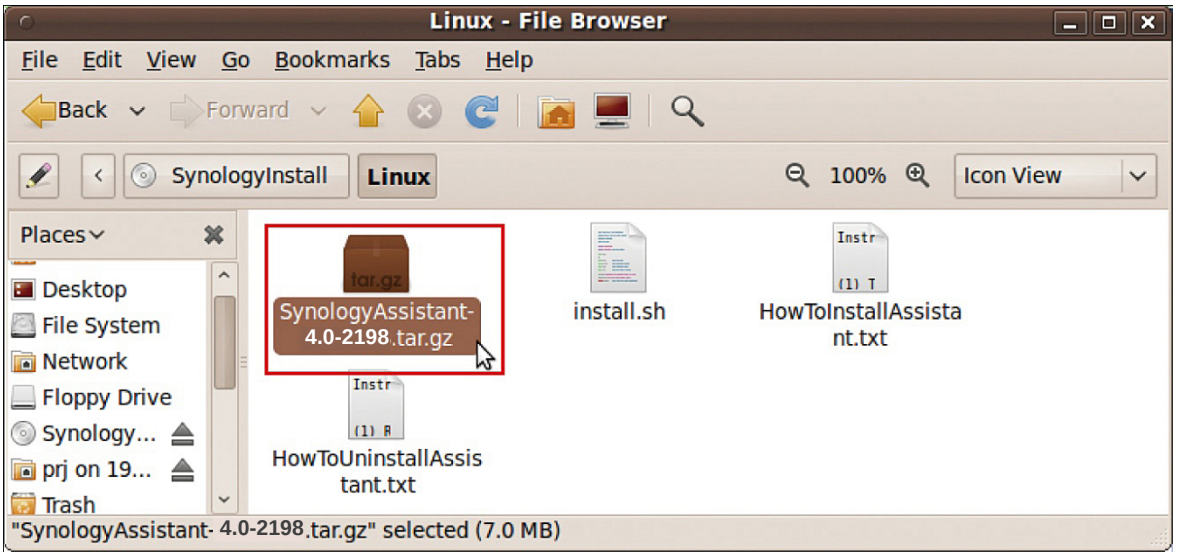
```
SynologyAssistant
```

If you want to install using the GUI:

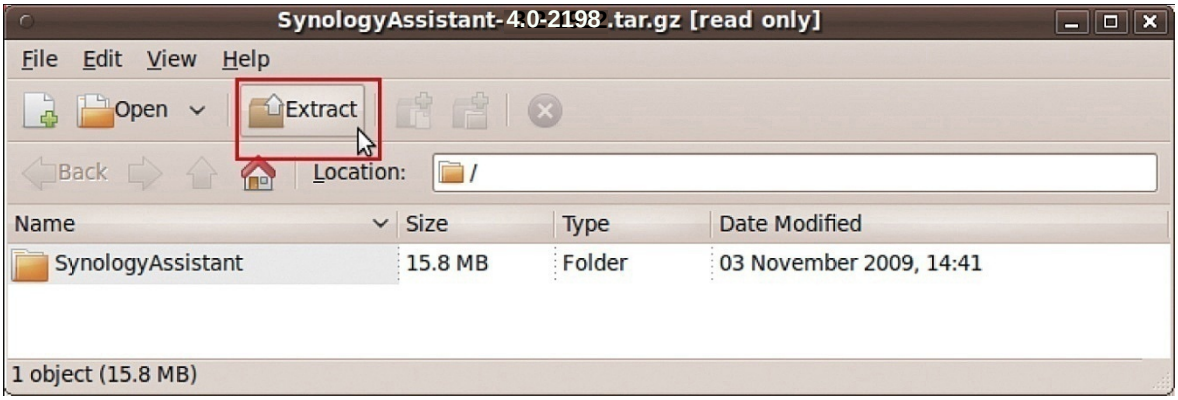
6 Go to **/usr/local** and **/usr/local/bin** and delete the following folders (if any):
Synology, **SynologyAssistant**

7 Insert the installation disc into your computer, and then double-click the **SynologyInstall** icon on the desktop.

8 In the **File Browser** window that appears, double-click the **Linux** folder, and then double-click **Synology Assistant-[number].tar.gz**. The **"[number]"** may vary from the picture shown below depending on the DSM version stored on the installation disc.



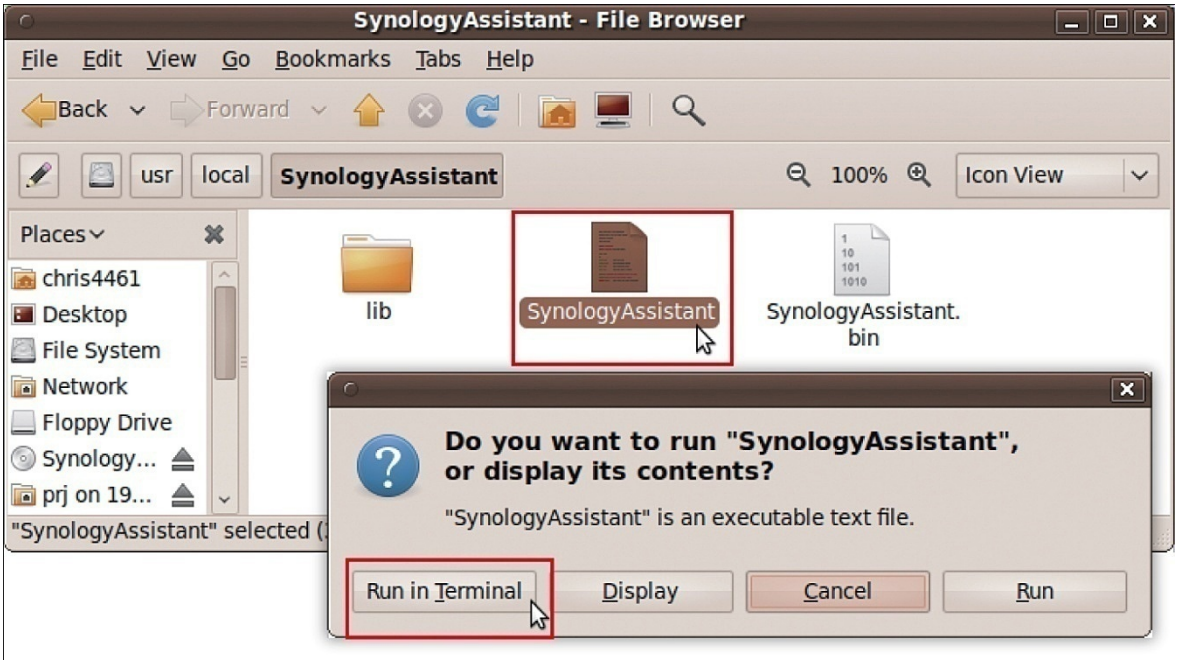
9 Click **Extract**, and then extract the **SynologyAssistant** directory to **/usr/local** or any other path.



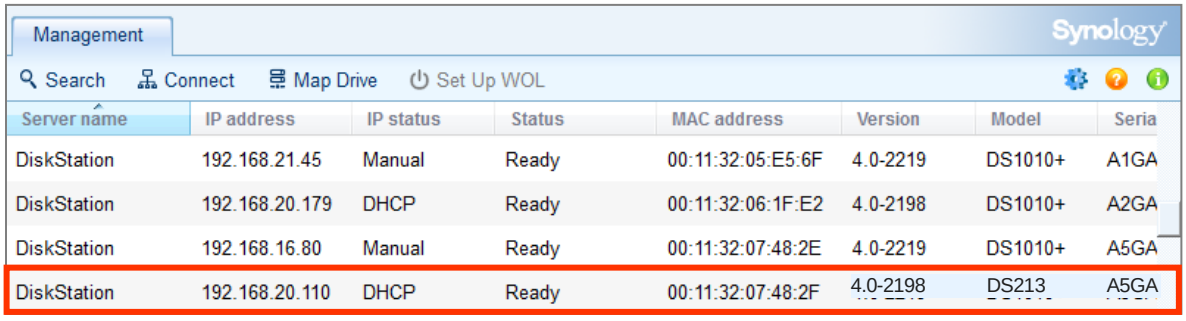
Important: If you are using 64bit Ubuntu, you have to install the 32bit libraries before proceeding. To install, type the following command in Terminal:

```
sudo apt-get install ia32-libs
```

10 Go to **/usr/local/SynologyAssistant** (or **[the path you just specified]/SynologyAssistant**), double-click **SynologyAssistant**, and then select **Run in Terminal** in the dialog box that appears.

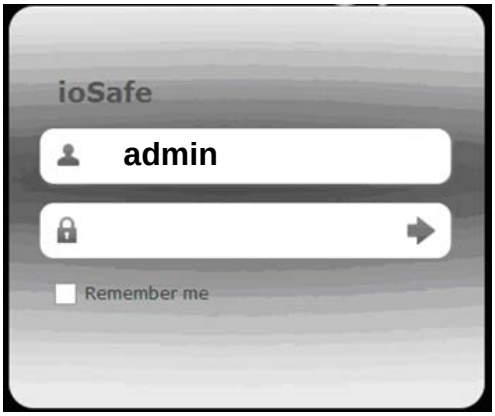


11 Synology Assistant will be installed and launched on your computer. It will search and find your ioSafe N2 within LAN, and the status of your ioSafe should be **DHCP Ready**. Click on connect to access your ioSafe N2.



Server name	IP address	IP status	Status	MAC address	Version	Model	Seria
DiskStation	192.168.21.45	Manual	Ready	00:11:32:05:E5:6F	4.0-2219	DS1010+	A1GA
DiskStation	192.168.20.179	DHCP	Ready	00:11:32:06:1F:E2	4.0-2198	DS1010+	A2GA
DiskStation	192.168.16.80	Manual	Ready	00:11:32:07:48:2E	4.0-2219	DS1010+	A5GA
DiskStation	192.168.20.110	DHCP	Ready	00:11:32:07:48:2F	4.0-2198	DS213	A5GA

12 A web browser should open showing the N2 Login screen. Enter the default login and password.



user name: admin

password: “empty”

Appendix

A

Specifications

Item	ioSafe N2
Fire Protection	Protects data from loss up to 1550°F for 1/2 hour per ASTM E119
Water Protection	Protects data from loss up to 10ft for 72 hours.
Internal HDD	SATA (II) x 2
Max. Capacity	8TB (2 x 4TB hard drives)
Hot Swappable HDD	Yes
External HDD Interface	• USB 3.0 x 2 • USB 2.0 x 1
LAN Port	Gigabit x 1
USBCopy	Yes
SDCopy	Yes
Size (HxWxD)	231mm x 150mm x 305mm (5.9” x 9.1” x 12.0”)
Weight	14 kg (31 lbs)
Supported Clients	• Windows XP and newer • Mac OS X 10.5 newer • Ubuntu 9.04 newer
Max. User Accounts	2048
Max. Group Accounts	256
Max. Shared Folders	256
Max. Concurrent Connections	128
Max. Supported IP Cameras	8
File System	• EXT 4，EXT3, FAT, NTFS (External disk only)
Volume Type	• Basic • JBOD • RAID 0 • RAID 1 • Synology Hybrid RAID (1-Disk Fault Tolerance)
Agency Certifications	• FCC Class B • CE Class B • BSMI Class B
HDD Hibernation	Yes
Scheduled Power On/Off	Yes
Wake on LAN/WAN	Yes
Language Localization	• English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk • Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu • Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文
Power Consumption And Environment Requirements	• Line voltage: 100V to 240V AC • Frequency: 50/60Hz • Operating Temperature: 40 to 95˚F (5 to 35˚C) • Storage Temperature: 15 to 155˚F (-10 to 70˚C) • Relative Humidity: 5% to 95% RH • Maximum Operating Altitude: 6500 feet (2000 m)

Appendix

B

LED Indication Table

LED Indication	Color	Status	Description
STATUS	Green	Static	Volume normal
		Slow on/off cycle	HDD Hibernation (All the other LED indicators will be off)
	Orange	Static	Available volume space < 1GB
			Available volume space < 1 %
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Gigabit Link
		Blinking	Network is active
		Off	Network is down
DISK 1~2	Green	Static	Disk is ready and idle
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot read / write
Copy	Green	Static	USB disk / SD card detected
		Blinking	Copying data
		Off	No USB disk / SD card attached
Power	Blue	Static	Power ready
		Blinking	Booting up
			Shutting down
		Off	Power off